DETAILED ACTION

1. This action is in response to Amendments filed on 01/12/2009.

Claims 24-26, 29-50 have been amended.

Claims 1-3, 6-26 and 29-50 are pending and considered with Examiner's Amendment as stated herein.

Response to Amendment

2. In view of Amendment **Claims 24-26 and 29-50** rejection under 35 U.S.C. 101 is withdrawn.

Information Disclosure Statement

3. The information disclosure statement (IDS) submitted on 10/21/2008 is being considered by the examiner. Signed and dated copy is attached to this Office Action.

EXAMINER'S AMENDMENT

4. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview and corresponding e-mail by Applicant's Attorney Kendrick Lo on 05/06/2009.

The Specification will be amended as follows:

Applicants' original disclosure par. [0111] – Delete reference to "or transmission-type," from paragraph.

The claims will be amended as follows:

Claim 1: (Currently Amended)

A method of processing a web service description so that said web service description is adapted for use with a mobile device, said web service description comprising a plurality of web service description elements, wherein said method is performed at a computing device remotely coupled to the mobile device, said method comprising:

receiving a first web service description file comprising said web service description, wherein said web service description defines an interface to a web service;

creating at least one accelerator output file from said web service description, said creating comprising optimizing said web service description for said mobile device;

wherein said at least one accelerator output file comprises a second web service description file, said second web service description file comprising an optimized web service description adapted for processing by said mobile device;

and transmitting said at least one accelerator output file to said mobile device, wherein said at least one accelerator output file facilitates invocations of said web service by said mobile device;

wherein said optimizing comprises resolving symbolic references in said web service description of said first web service description file such that said at least one accelerator output file is parseable by said mobile device in one pass;

and wherein said resolving comprises representing the plurality of web service description elements as nodes in a graph, re-ordering the nodes into a tree data structure so that said symbolic references are resolved in a forward direction, and creating said at least one accelerator output file from said tree data structure;

wherein each of a subset of said plurality of web service description elements is associated with transport protocols not supported by said mobile device, and wherein said optimizing further comprises identifying said subset, and excluding said subset from said at least one accelerator output file.

Claim 6: Cancelled

Claim 24: (Currently amended)

A web services accelerator comprising a processor, which resides on a computing device in a network in which said computing device is coupled to a mobile device, wherein said processor is configured to perform a method of processing a web service description so that said web service description is adapted for use with said mobile device, said web service description comprising a plurality of web service description elements, said method comprising:

receiving a first web service description file comprising said web service description, wherein said web service description defines an interface to a web service;

creating at least one accelerator output file from said web service description, said creating comprising optimizing said web service description for said mobile device, wherein said at least one accelerator output file comprises a second web service description file, said second web service description file comprising an optimized web service description adapted for processing by said mobile device;

and transmitting said at least one accelerator output file to said mobile device, wherein said at least one accelerator output file facilitates invocations of said web service by said mobile device;

wherein said optimizing comprises resolving symbolic references in said web service description of said first web service description file such that said at least one accelerator output file is parseable by said mobile device in one pass;

and wherein said resolving comprises representing the plurality of web service description elements as nodes in a graph, re-ordering the nodes into a tree data structure so that said symbolic references are resolved in a forward direction, and creating said at least one accelerator output file from said tree data structure;

wherein each of a subset of said plurality of web service description elements is associated with transport protocols not supported by said mobile device, and wherein said optimizing further comprises identifying said subset, and excluding said subset from said at least one accelerator output file created at said creating.

Claim 29: Cancelled

Claim 50: (Currently amended)

A storage media comprising program instructions which are executable at a computing device remotely coupled to a mobile device, to implement a method of processing a web service description so that said web service description is adapted for use with said mobile device, said web service description comprising a plurality of web service description elements, said method comprising:

receiving a first web service description file comprising said web service description, wherein said web service description defines an interface to a web service;

creating at least one accelerator output file from said web service description, said creating comprising optimizing said web service description for said mobile device, wherein said at least one accelerator output file comprises a second web service description file, said second web service description file comprising an optimized web service description adapted for processing by said mobile device;

and transmitting said at least one accelerator output file to said mobile device, wherein said at least one accelerator output file facilitates invocations of said web service by said mobile device;

wherein said optimizing comprises resolving symbolic references in said web service description of said first web service description file such that said at least one accelerator output file is parseable by said mobile device in one pass;

and wherein said resolving comprises representing the plurality of web service description elements as nodes in a graph, re-ordering the nodes into a tree data structure so that said symbolic references are resolved in a forward direction, and creating said at least one accelerator output file from said tree data structure;

wherein each of a subset of said plurality of web service description elements is associated with transport protocols not supported by said mobile device, and wherein said optimizing further comprises identifying said subset, and excluding said subset from said at least one accelerator output file.

REASONS FOR ALLOWANCE

5. The following is an examiner's statement of reasons for allowance:

Examiner has carefully considered Amendment dated 01/12/2009 and reviewed all pending **Claims 1-3, 6-26 and 29-50.**

The current application is directed towards WSDL files that contain symbolic references, technique for performing re-ordering, and creating acts for resolving symbolic references and the issues associated with processing them on mobile devices. Further technique that involves the manipulation of web service description elements modeled as graphical elements.

Independent Claims 1, 24 and 50 disclose method of processing a web service description so that said web service description is adapted for use with a mobile device,

wherein said web service description defines an interface to a web service;

creating at least one accelerator output file from said web service description, said creating comprising optimizing said web service description for said mobile device, wherein said at least one accelerator output file comprises a second web service description file, said second web service description file comprising an optimized web service description adapted for processing by said mobile device;

transmitting said at least one accelerator output file to said mobile device, wherein said at least one accelerator output file facilitates invocations of said web service by said mobile device;

wherein said optimizing comprises resolving symbolic references in said web service description of said first web service description file such that said at least one accelerator output file is parseable by said mobile device in one pass;

and wherein said resolving comprises representing the plurality of web service description elements as nodes in a graph, re-ordering the nodes into a tree data structure so that said symbolic references are resolved in a forward direction, and creating said at least one accelerator output file from said tree data structure;

wherein each of a subset of said plurality of web service description elements is associated with transport protocols not supported by said mobile device, and wherein said optimizing further comprises identifying said subset, and excluding said subset from said at least one accelerator output file.

One of the prior art of records, Lai suggests that an XML document may be represented as a tree structure. However, Lai does not contemplate that the nodes in that tree structure should be re-ordered for any purpose. Lai clearly and explicitly teaches "optimizing" using multiple engine. Therefore, the "optimizing" in Lai is achieved by increasing processing capability. The "optimizing" in Lai is achieved by looking at e.g. two web service descriptions as input, and determining from a comparison of their ontologies whether e.g. the two services might be combined into a

third service. Lai does not explicitly disclose the creation of an accelerator output file that comprises a second web service description. The Applicants' independent claims require that this accelerator output file be created by optimizing the web service description of the first web service description file for the mobile device.

The Applicants' independent claims also require that the act of optimizing specifically comprise resolving symbolic references in the web service description of the first web service description file, Lai is silent regarding, re-ordering, and creating acts performed in the resolving of symbolic references, in the optimization performed to create the accelerator output file.

One of another prior art of records, Arellano performs its "optimization" in a different way. Arellano's "optimization" involves comparing the ontological descriptors of various services, namely rules and text for example. No mention is made of optimizing by way of resolving symbolic references, as required by the Applicants' claims. Further, there are no acts performed in Arellano on the ontological descriptors that could be considered analogous to the specific representing, re-ordering, and creating acts performed in the Applicants' resolving of symbolic references, required by the Applicants' independent claims.

Upon an updated search of the prior art, no significant sources were located that teach or suggest, " re-ordering, and creating acts performed in the resolving of symbolic references, in the optimization performed to create the accelerator output file."

Thus the prior art of record neither render nor anticipate the claimed invention.

Therefore, all pending claims are allowed.

Conclusion

6. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Muktesh G. Gupta whose telephone number is 571-270-5011. The examiner can normally be reached on Monday-Friday, 8:00 a.m. -5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William C. Vaughn can be reached on 571-272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MG

/William C. Vaughn, Jr./

Supervisory Patent Examiner, Art Unit 2444